

**RECYCLED WATER INDIVIDUAL PERMIT NO. R-511181  
PLACE ID #143267, LTF #71814, Other Amendment**

**I. FACILITY INFORMATION**

**Name and Location**

Name of Permittee:	Resolution Copper Mining LLC
Mailing Address:	102 Magma Heights, P.O. Box 1944 Superior, Arizona 85173
Facility name and location:	Resolution Copper Mining LLC 102 Magma Heights Superior, Arizona
Reuse Site name and location:	New Magma Irrigation & Drainage District Service Area 34630 North Schnepf Road Queen Creek, Arizona 85242

**Regulatory Status**

The Individual Industrial Recycled Water Permit application was received on June 6, 2018. The previous permit was signed on August 30, 2013.

**Facility Description**

Resolution Copper Mining LLC (RCML) is an underground mine with operations located in two areas: the East Plant Site and the West Plant Site (Figure 1). The Mine Water Treatment Plant is located on the West Plant Site and is used to treat mine dewatering water from the No. 8 Shaft and water from the Never Sweat Tunnel at the West Plant Site and the Nos. 9 and 10 Shafts, located on the East Plant Site. The following waste streams are added to the mine dewatering water:

- From the East Plant Site (Figure 2):
  - Discharges from the Shaft Nos. 9/10 Area Intermediate Rock Stockpile – Regulated by a Type 2.02 General Permit for Intermediate Rock Stockpiles at Mining Sites, No. 511151,
  - Discharges from the Wash Bay and Expanded Wash Bay – Regulated by two Type 3.03 General Permits for Vehicle and Equipment Washes, Nos. 106373 and 511171, and
  - The mine Condenser Cooling Towers and Associated Chiller blowdown.
- From the West Plant Site (Figure 3):
  - Tailings Pond 6 storm water – Regulated by the Area-wide Aquifer Protection Permit No 101703

- Discharges from the Loadout Intermediate Rock Stockpile, No. 101703
- Discharges from the Intermediate Rock Stockpile, No. 101703
- Non-Contact Stormwater from CP-105

The mine dewatering water and industrial reclaimed water will be mixed with Central Arizona Project (CAP) water in the Lateral B, C and D Conveyances of the New Magma Irrigation and Drainage District (NMIDD) prior to application, and is applied at consumptive use rates to irrigate crops including but not limited to alfalfa, barley, Bermuda grass, cotton, sorghum, turf, and wheat on approximately 10,000 acres of cropland (Figure 4) located approximately 27 miles southwest of the MWTP (Figure 1). The monitoring requirements and discharge limits for the industrial reclaimed water discharged from the Mine Water Treatment Plant are specified in this Recycled Water Individual Permit. Irrigation with industrial reclaimed water may occur at rates as stated in this permit. The Discharge Limit for flow from the industrial discharges through the Mine Water Treatment Plant to the Direct Reuse Irrigation fields shall not exceed 109,500,000 gallons per month. Daily flow rates to the reuse site shall be monitored and recorded. This permit only authorizes the use of reclaimed wastewater for agricultural irrigation as previously described.

The industrial reclaimed water must meet the Aquifer Water Quality Standards for selected metals, volatile organic compounds, semi-volatile organic compounds, and safe-drinking water inorganics as indicated in Table 2 of this permit. Industrial reclaimed water monitoring shall be performed on a routine basis as indicated in Table 2 of this permit.

**Table 1: Reuse Site Center Point Coordinates (in WGS84)**

Field ID	Latitude (North)	Longitude (West)
B01	33.1727939	-111.5255063
B02	33.1727833	-111.5209731
B03	33.1727612	-111.5166082
B04	33.1727780	-111.5123187
B05	33.1728481	-111.5078933
B06	33.1728205	-111.5034746
B07	33.1726183	-111.4991817
B08	33.1720953	-111.4947522
B09	33.1656239	-111.5252415
B10	33.1655884	-111.5207996
B11	33.1655909	-111.5164136
B12	33.1655822	-111.5121159
B13	33.1655672	-111.5076459
B14	33.1656581	-111.5032393
B15	33.1657028	-111.4988883
B16	33.1657333	-111.4946025
B17	33.1571469	-111.5072850
B18	33.1566578	-111.5032394
B19	33.1579518	-111.4989131
B20	33.1608663	-111.4944794
B21	33.1576719	-111.4943896
B22	33.1729169	-111.5343925
B23	33.1727444	-111.5301007

Field ID	Latitude (North)	Longitude (West)
B24	33.166692	-111.5299286
B25	33.1746849	-111.5383523
C01	33.1714715	-111.5593559
C02	33.1728909	-111.5557925
C03	33.1729547	-111.5517363
C04	33.1735187	-111.5479474
C05	33.1697556	-111.5434153
C06	33.1701097	-111.5392582
C07	33.1655370	-111.5368194
C08	33.1508209	-111.5508379
C09	33.1508939	-111.5462783
C10	33.1510187	-111.5424748
C11	33.1512668	-111.5381760
C12	33.1527150	-111.5247842
C13	33.1491983	-111.5254080
C14	33.1492403	-111.5318879
C15	33.1437390	-111.5451334
C16_1	33.1439059	-111.5375101
C16_2	33.1434227	-111.5328901
C17	33.1434770	-111.5286526
C18	33.1360641	-111.5070242
C19	33.1300061	-111.5022534
C20	33.1224157	-111.5020240
C21_1	33.1215907	-111.5062625
C21_2	33.1278552	-111.5061199
C21_3	33.1230209	-111.5103145
C22	33.1309490	-111.5095437
C23	33.1314923	-111.5192107
C24	33.1288609	-111.5185959
C25	33.1309902	-111.5286943
C26	33.1252074	-111.5184518
C28	33.1263878	-111.5136072
C29	33.1397222	-111.5025000
C30_1	33.1452118	-111.4846989
C30_2	33.1452778	-111.4961111
C31	33.1424583	-111.4902607
C32	33.1392773	-111.4939565
C33	33.1604129	-111.5154120
C34	33.1575996	-111.5192728
C35	33.1539446	-111.5179184
C36	33.1532225	-111.5115606
C37	33.1492091	-111.5121722
C38	33.1315035	-111.4933637
C39	33.1358445	-111.4889590
C40	33.1366227	-111.4844038
C41	33.1366882	-111.4800145
C42	33.1366436	-111.4761884
C43	33.1309657	-111.4888897
C44	33.1249171	-111.4883868
C45	33.1221961	-111.4842142
C46	33.1292239	-111.4844532

Field ID	Latitude (North)	Longitude (West)
C47	33.1292618	-111.4801530
C48	33.1222960	-111.4800058
C49	33.1224442	-111.4758355
C50	33.1292999	-111.4760875
C51	33.1434865	-111.4762479
C52	33.1528597	-111.5323219
C53	33.1562895	-111.5296169
C54	33.1392826	-111.5025031
C55	33.1427600	-111.4999554
C56	33.1963077	-111.6045915
C57	33.2030300	-111.6024978
C58	33.2018055	-111.5974442
C59	33.1945183	-111.5974560
C61	33.1365201	-111.4980815
C62	33.1216486	-111.4933972
C63	33.1215736	-111.4975208
C66	33.1272114	-111.4979638
C69	33.1492523	-111.5210936
C70	33.1489800	-111.5185432
C71	33.1453434	-111.4962989
C75	33.1896724	-111.5969078
C80	33.1433333	-111.5413889
C81	33.1651448	-111.5405111
C82	33.1645105	-111.5428152
C83	33.1780556	-111.5677778
C84	33.1747222	-111.5719444
C85	33.1752778	-111.5775000
D01	33.1439761	-111.4717520
D02	33.1439286	-111.4674701
D03	33.1369011	-111.4716028
D04	33.1367952	-111.4673277
D05	33.1406956	-111.4648342
D06	33.1362838	-111.4631924
D07	33.1345147	-111.4594639
D08	33.1310282	-111.4590441
D09	33.1293245	-111.4629502
D10	33.1311767	-111.4672855
D11	33.1295250	-111.4715433
D12	33.1277007	-111.4672401
D13	33.1224541	-111.4714067
D14	33.1240112	-111.4672187
D15	33.1237878	-111.4629645
D16	33.1276015	-111.4588377
D17	33.1238051	-111.4588104
D18	33.1202432	-111.4587995
D19	33.1202267	-111.4629269
D20	33.1204573	-111.4671496
D21	33.1149113	-111.4881869
D22	33.1128472	-111.4841109
D23	33.1092577	-111.4885537
D24	33.1093576	-111.4824551

Field ID	Latitude (North)	Longitude (West)
D25	33.1058053	-111.4885658
D26	33.1058002	-111.4806173
D27	33.1169388	-111.4834083
D28	33.1164625	-111.4781852
D29	33.1132580	-111.4774422
D30	33.1097983	-111.4758017
D31	33.1068449	-111.4744017
D32	33.1059239	-111.4691292
D33	33.1095260	-111.4692577
D34	33.1131586	-111.4692607
D35	33.1167650	-111.4712000
D36	33.1167317	-111.4671858
D37	33.1148960	-111.4629138
D38	33.1094921	-111.4628740
D39	33.1058637	-111.4628383
D40	33.1058706	-111.4585963
D41	33.1094855	-111.4586538
D42	33.1148743	-111.4587094
D43	33.1269429	-111.4542101
D44	33.1267703	-111.4502429
D45	33.1240561	-111.4533792
D46	33.1249821	-111.4502212
D47	33.1232463	-111.4451631
D48	33.1203678	-111.4420950
D51	33.1194761	-111.4509128
D52	33.1166616	-111.4529792
D53	33.1131116	-111.4541680
D54	33.1119029	-111.4504241
D55	33.1077557	-111.4541677
D56	33.1065615	-111.4479728
D59	33.1111560	-111.4449583
D60	33.1153200	-111.4465841
D61	33.1177779	-111.4470802
D62	33.1108718	-111.4415979
D63	33.1105176	-111.4370143
D64	33.1069368	-111.4333101
D65	33.1314626	-111.4554120
D66	33.1294384	-111.4526193
D75	33.1194898	-111.4462859
C86	33.1577778	-111.5197222
C87	33.1816667	-111.5677778
C88	33.1677778	-111.5594444
C90	33.1889890	-111.5707220
C91	33.1853710	-111.5705320
C92	33.1853790	-111.5616240
C93	33.1817460	-111.5546310
C94	33.1781480	-111.5534060
C95	33.1817500	-111.5601940

**II. COMPLIANCE WITH AQUIFER WATER QUALITY STANDARDS**

### **Monitoring and Reporting Requirements**

The monitoring requirements for this facility are specified in this permit for both volume (daily and monthly) and quality (quarterly and annually).

## **III. ADMINISTRATIVE INFORMATION**

### **Public Notice (A.A.C. R18-9-A703(B))**

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft permit or other significant action with respect to a permit or application. The basic intent of this requirement is to ensure that all interested parties have an opportunity to comment on significant actions of the permitting agency with respect to a permit application or permit. This permit will be public noticed in a local newspaper after a pre-notice review by the applicant and other affected agencies.

### **Public Comment Period (A.A.C. R18-9-A703(B))**

The program rules require that permits be public noticed in a newspaper of general circulation within the area affected by the facility or activity and provide 30 calendar days for interested parties to respond in writing to ADEQ.

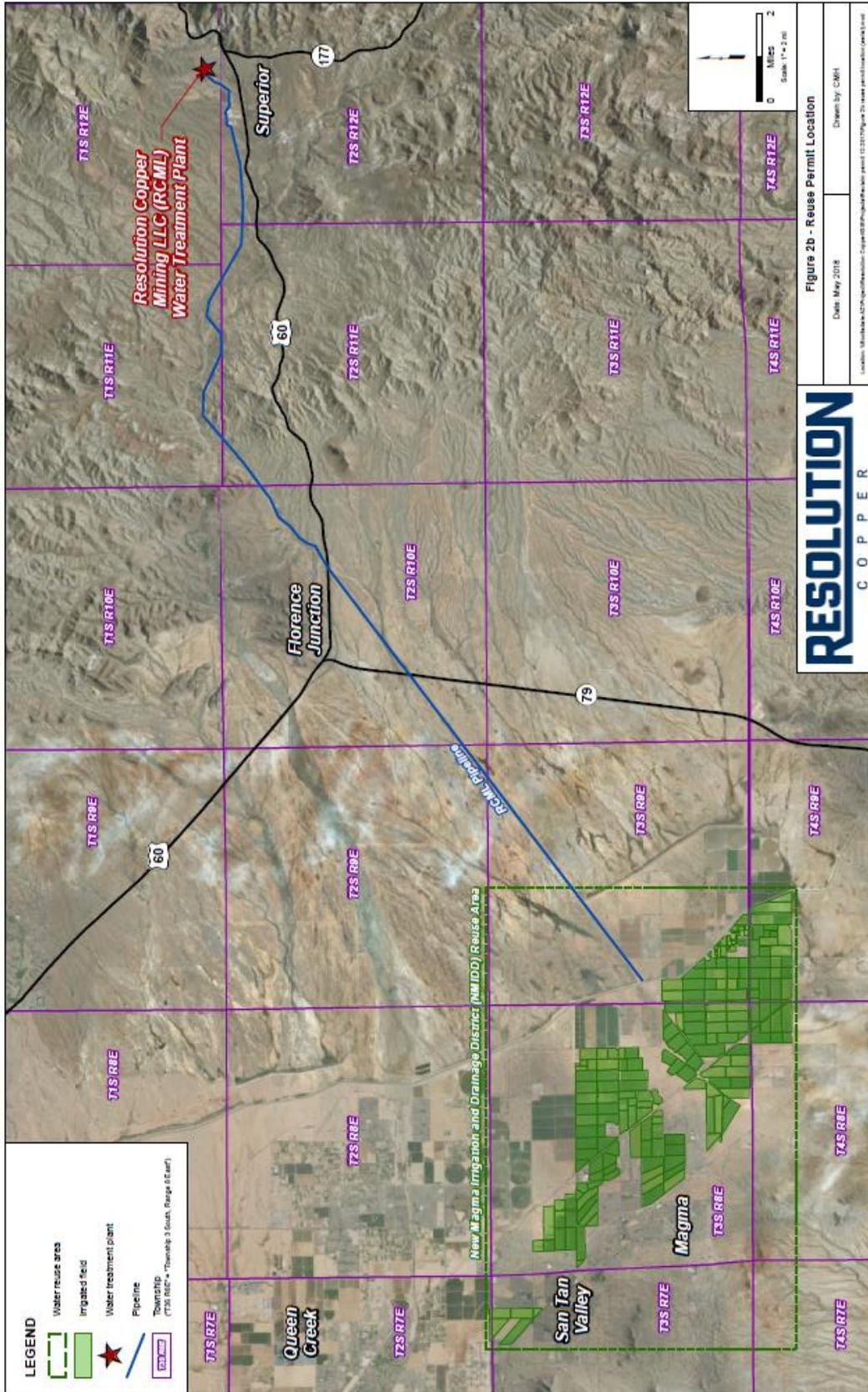
### **Public Hearing (A.A.C. R18-9-A703(B))**

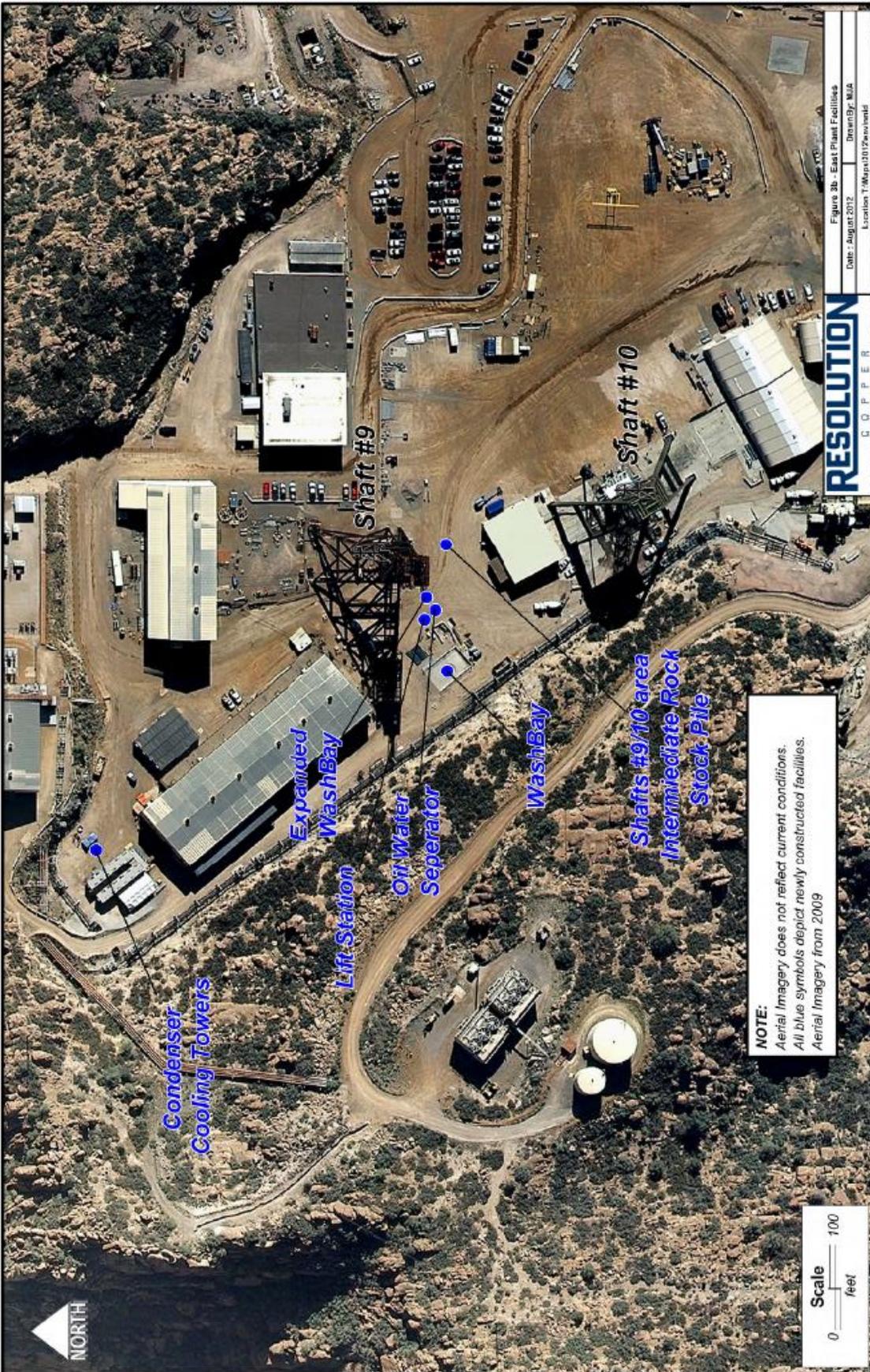
A public hearing for this permit was held on “date, time and location of hearing”. Comments were solicited from the public at this hearing.

## **IV. ADDITIONAL INFORMATION**

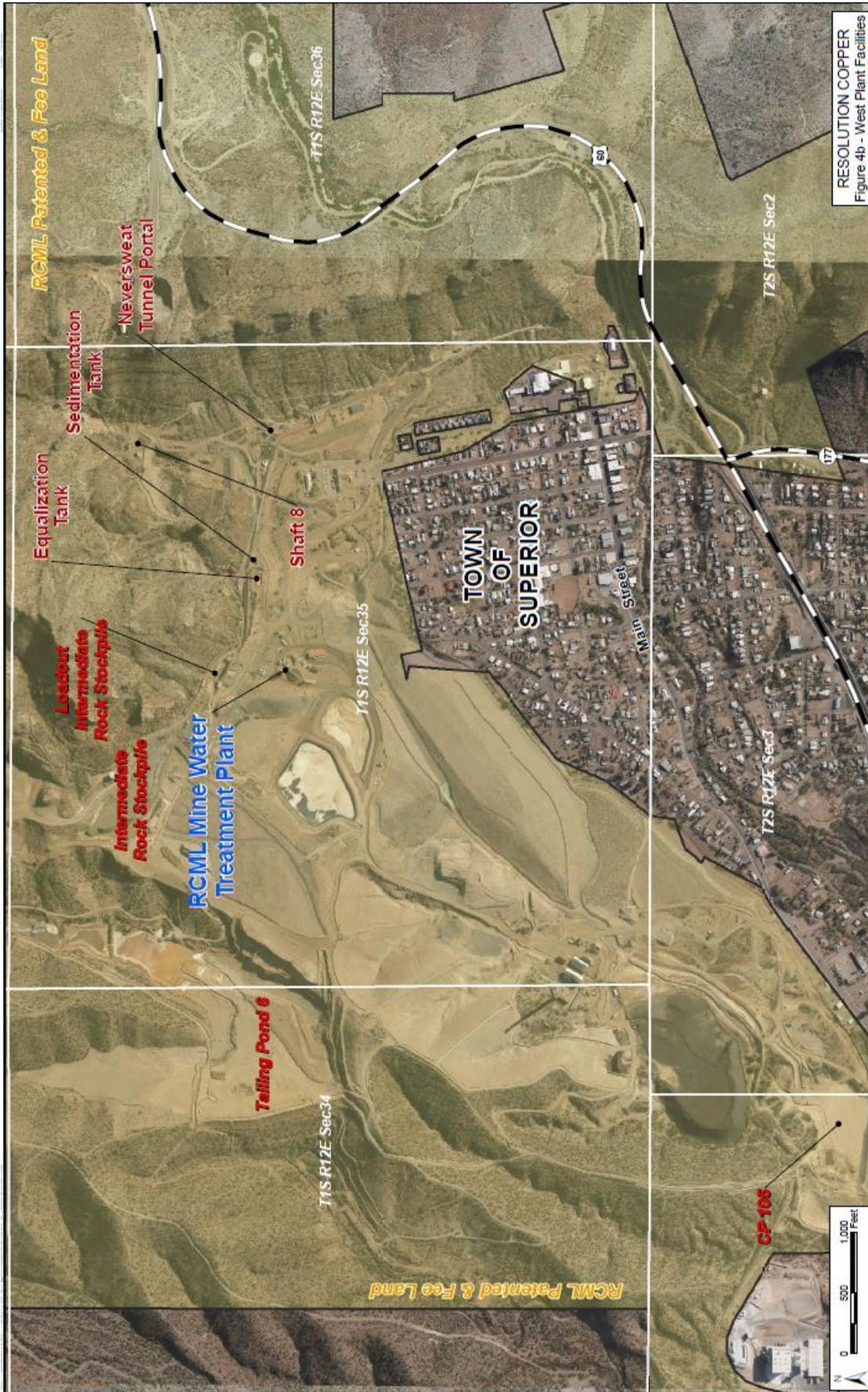
Additional information relating to this proposed permit may be obtained from:

Arizona Department of Environmental Quality  
Water Quality Division, Groundwater Protection and Water Reuse Value Stream  
Attn: David M. Haag, R.G.  
1110 W. Washington St., Mail Code: 5415B-3  
Phoenix, Arizona 85007  
Email: haag.david@azdeq.gov





**NOTE:**  
 Aerial Imagery does not reflect current conditions.  
 All blue symbols depict newly constructed facilities.  
 Aerial Imagery from 2009



RESOLUTION COPPER  
 Figure 4b - West Plant Facilities

